

ABSTRACT

5 A rotor (10) for a miniature electric motor includes  
a magnet (12) having a rotation axis (14) and a  
shaft (16) fixed concentrically to the magnet. The  
magnet (12) includes a through hole (20) extending  
coaxially with the rotation axis (14). The shaft (16)  
includes a portion (24) fitted in the through hole (20).  
10 The portion (24) has an axial interengagement length ( $t_1$ )  
shorter than an axial length ( $T_1$ ) of the through  
hole (20). The rotor (10) also includes reinforcing  
means provided at least inside the through hole (20).  
The magnet (12) comprises an annular magnet  
material (18), and a coating (22) formed on a surface of  
15 the magnet material and arranged at least inside the  
through hole (20). The reinforcing means is formed as  
the coating (22) of the magnet (12), and acts to ensure a  
fixing force to securely hold the shaft (16) in a  
predetermined position on the magnet.